Specifications for IKONOS Data (General)

PHASE II Science Data Buy, Space Imaging EOSAT

SPECIFICATIONS	IKONOS SENSOR
Raw Image Scene Size	11.3 km by 11.3 km
Image File Format	Formats compatible to accepted image analysis packages such as ArcInfo, ERDAS Imagine, ENVI and ER Mapper
Metadata File Format	ECS Intermediate Standard
Tasking	Tasking modifications are allowable up 1 to 3 days prior to image acquisition
Average Time to Process	= 24 hours for Origional, 72 hours for Master and Model . *(Time measured from receipt of data from archive or new collection to ship date.)* Based on North American delivery, single product order.
Revisit Frequency	3 to 4 days
Spectral Band Pass Accuracy (at all field angles)	• Band edge points at 50% peak response shall be within +0.01 microns. • Slope through the 50% point shall be at least 20%/0.02 •m. • Out-of-band filter response <5% of total integrated transmittance within 5% transmission points of that band. • The response for 70% of the data centered on the peak response shall be within 20% of the maximum value.
Radiometric Accuracy & Stability	• Absolute Radiometric Accuracy to within ± 10% • Relative Radiometric Accuracy to within ± 5.3% • Linearity to within ±5.0% of full scale exposure over the entire imaging exposure dynamic range • Requirements on banding, streaking, failed and noncalibrated detectors - 99.5% of all the detectors should be within 5% of the mean quantum effeciency and dark current of the focal plane array detectors.

Image Quality (at all field angles)	• Spectral bands have imaging peak-to-peak signal-to-RMS noise ratio of >/= 10 at Nyquist. (based on 10% target reflectance; 2:1 target-to-background ratio; scene illumination equal to solar elevation of 30 degrees) At zero spatial frequency, the unmodulated SNR will be greater than 94 for all spectral bands. • Edge quality associated with a pan sensor will provide a MTF of 0.15 at Nyquist frequency. • Edge quality associated with a MSS sensor will provide a MTF of 0.30 at Nyquist frequency.